

**Subject: Library and Information Science**

Production of Courseware

 **-Content for Post Graduate Courses****Paper No: 03 Knowledge Organization and Processing – Cataloguing****Module : 08 Cooperative Cataloguing, Centralized Cataloguing and Union Catalogue and Precise**

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Description of Module	
<b>Subject Name</b>	Library and Information Science
<b>Paper Name</b>	03 Knowledge Organization and Processing – Cataloguing
<b>Module Name/Title</b>	Cooperative Cataloguing, Centralized Cataloguing and Union Catalogue
<b>Module Id</b>	<b>LIS/KOP-C/M/8</b>
<b>Pre-requisites</b>	
<b>Objectives</b>	<p>Objectives of the module are as follows:</p> <ol style="list-style-type: none"> <li>1. To define Cooperative cataloguing and discuss its need and purpose, advantages and disadvantages, and its various forms.</li> <li>2. To define Centralized cataloguing and discuss its objectives, advantages, disadvantages and its various forms.</li> <li>3. To define Union Catalogue and discuss its advantages.</li> <li>4. To discuss MARC I &amp; II and MARC 21.</li> </ol>
<b>Keywords</b>	Cooperative cataloguing, Centralized cataloguing, Union catalogue, Shared cataloguing, Cataloguing in source, Cataloguing in publication, Pre-Natal cataloguing, MARC.

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### 1. Introduction

Cooperation in any sphere of human activities has become a common practice today. The success achieved through cooperation on national and international levels in many fields in the world has set us thinking as to how cooperation is essential to achieve any end.

Library cooperation is essentially a development of the twentieth century. Its evolution has its roots in the social, economic and technological changes and advances of the last seventy five years or so.

Cooperation has helped to mitigate the disability of limited resources, to coordinate methods and activities and to bring about by standardization an uniformity in the administration of services offered to the public.

## **2. Cooperative Cataloguing**

Cooperative or centralized processing in one form or another is not a new idea, but it is an old one. Panizzi, William D Cooley and Charles C Jewett are the pioneers who advocated the need of cooperative cataloguing in 1850s. Through cooperative cataloguing, cooperating libraries share and avoid the wasteful duplication of cataloguing processes at individual libraries in producing a catalogue for their mutual benefit and also for the benefit of other libraries.

### **2.1 Definitions**

The various authorities of library science have defined Cooperative Cataloguing. Some definitions are as follows:

#### **Harrods's Librarian's Glossary**

‘The sharing by a number of libraries of cost and / or labour of cataloguing to avoid the duplication of effort common to each’.

#### **ALA Glossary of Library Terms**

‘The production of catalogue entries through the joint action of several libraries, in order to avoid duplication of effort, particularly the plan by which cooperating libraries prepare copies of catalogue cards to be printed by the Library of Congress’.

#### **Needham, C. D.:**

‘Cooperative cataloguing refer to a situation where a number of independent libraries share the work of producing a catalogue for their mutual benefit’.

Cooperative cataloguing may operate at local level, between two or more adjacent library systems, at regional level, as in the compilation of regional union catalogues or at national level. National cooperative cataloguing is often combined with national centralized cataloguing so that the widest possible coverage of publications is represented by catalogue entries available to any library.

## 2.2 Objectives

S.M. Tripathi has enumerated the objectives of cooperative cataloguing as under:-

- 1) The basic object of cooperative cataloguing is to effect economy in the cost of cataloguing which the cooperating libraries share and to obviate the wasteful duplication of cataloguing processes of the participating libraries.
- 2) The union catalogue produced in this way will assist in the location and selection of documents which cannot be easily known in its absence.
- 3) The most important object of the cooperative cataloguing is to reveal the total resources of a region which enables the readers to select the desired materials.

## 2.3 Need and Purpose

Need for cooperative cataloguing was felt long back. In 1850 Royal Commission on British Museum asked Panzzi to prepare a catalogue of British Museum as well as a Union catalogue of works published in English in Great British or its colonies. C.C. Jewett and William D. Cooley advocated for the need of centralized and cooperative cataloguing long back. Due to literature explosion, acquisition rate of publications in libraries is increasing. A general review of the book stock of public and university libraries shows that there are several books, which are common to all these collections. If the collection of each library is separately catalogued, there will be huge wastage of money, manpower and machinery. If this work is done by a central agency, 60 per cent

of the books in university libraries and 90 per cent of the books in public libraries can be provided with ready made catalogue cards. The remaining stock can be catalogued by individual libraries.

## 2.4 Advantages

Some of the advantages of cooperative cataloguing are enumerated below:

1. Efficient and adequate catalogue entries are available.
2. Delay in cataloguing is reduced.
3. There will be saving of labour and time of the staff and there services can be devoted for readers advisory services, reference service, library extension activity etc.
4. There will be huge economy as printed cards will be cheaper.

## 2.5 Disadvantages

There will be some disadvantages of cooperative cataloguing:

1. Catalogue cards for certain titles of books cannot be supplied by cooperative catalogue agency.
2. It will decrease the number of skilled cataloguers to be employed by different libraries resulting unemployment of professional staff.
3. In case, cataloguing agency does not enjoy the copyright, books will have to be sent to the cataloguing agency by participating libraries which will be difficult process.

## 2.6 Forms of Cooperative Cataloguing

- a) The Library of Congress is continuing a cooperative cataloguing programme. In this programme, other libraries are expected to contribute catalogue card copies for printing. Each copy is edited by the Library of Congress so as to correlate it with other entries provided on the LC Cards. These edited copies are printed and distributed to subscribers.

- b) Since 1965, the Library of Congress has established as global network of national and regional offices for international cooperation. These offices supply bibliographical data which serves as a basis for cataloguing by the Library of Congress.
- c) A good example of cooperative cataloguing is the possibilities of the creation of a union catalogued on the basis of data supplied by the individual libraries.

### 3. Centralized Cataloguing

In a library system, where there is a Central Library having some branch libraries, many activities are performed repeatedly. The same book acquired at different branches will have to be classified and catalogued simultaneously. It is merely a wastage of time and manpower. If a central library takes of this work on behalf of its branches, the qualitative work can be done economically and uniformly.

If the same book is purchased in several libraries, all the libraries will have to process them. If book itself gives the catalogue entry or publisher supplies the catalogue entry along with book, the burden of classifying and cataloguing will be reduced to a large extent. This is possible through Centralized Cataloguing.

#### 3.1 Definitions

##### Harrod's Librarian's Glossary

- (a) The cataloguing of books by some central bureau, and the distribution there from of entries.
- (b) The cataloguing at one library of all the books of a library system comprising more than one library, thus achieving uniformity throughout the system.

##### ALA Glossary of Library Terms

- (a) The preparation in one library or a central agency of catalogues for all the libraries of a system.
- (b) The preparation of catalogue cards by one library or other agency which distributes them to libraries.

##### Needham, C. D.

The cataloguing of documents by some central organization such as BNB, its main purpose, from a cataloguing point of view, being to save duplication of effort in cataloguing departments of numerous independent libraries.

### **Encyclopedia of Librarianship**

The cataloguing, by one library or cataloguing office within a system of libraries, of all books acquired by all those libraries so that the results of such cataloguing are used by the individual libraries.

### **3.2 Objectives**

The objectives of Centralized cataloguing according to Morsch are:

- (a) Avoid duplications of work;
- (b) To make the most effective use of the cataloguing personnel;
- (c) To reduce the cost of cataloguing;
- (d) To promote the uniformity of cataloguing and catalogues;
- (e) To raise the over all level of the quality of cataloguing.

### **3.3 Advantages**

The advantages of Centralized cataloguing are many. For example:

- (a) Duplication of work can be avoided;
- (b) Cost of cataloguing can be minimized;
- (c) Uniform and standard cataloguing practices can be adopted;
- (d) Cataloguing can be qualitatively improved;
- (e) Some of the professional staff who are relieved of cataloguing work can be utilized for other useful professional service;
- (f) Preparation of union catalogue will become easy;
- (g) Promptness in service is possible; and
- (h) Use of sophisticated equipment for preparing entries is possible.
- (i) Printed catalogue cards are more legible and give neat appearance.

### 3.4 Disadvantages

There are some drawbacks and disadvantages in Centralized cataloguing. They are:

- (a) Pooling up the necessary funds to opt for centralized cataloguing may be difficult for some libraries.
- (b) Because of local variations, it may be difficult to go in for centralized cataloguing.
- (c) Some time centralized cataloguing system may cause delay as compared to local cataloguing.

### 3.5 Forms of Centralized Cataloguing

Some of the forms of Centralized cataloguing are as follows:-

- (a) Card (or sheaf) service
- (b) MARC (Machine-Readable Cataloguing) service
- (c) Information service
- (d) Cataloguing-in-Source
- (e) Cataloguing-in-Publication
- (f) Pre-natal cataloguing

#### 3.5.1 Card (or sheaf) service

This is a type of Centralized cataloguing where the unit entries are prepared on cards (or sheaf) by a Central organization. Individual libraries can buy these cards in multiple numbers and after adding the appropriate headings to the basic unit, these cards are filed in catalogues. The BNB and the Library of Congress are rendering this type of service. There are many commercial firms as well providing commercial cataloguing services viz H.W. Wilson Company, U.S. Reprint Service and Zerox Bibliographics all of which supply sets of cards. Micrographic Cataloguing Retrieval System is a microfiche service, from which cards can be produced by reader see copy printer. Library of Congress also distribute proofs sheets, one each of all its cards. With the help of proof sheets, a typist can type out single cards and prepare other cards without much problem.

The serial number of Library of Congress given to every item catalogued are carried in US trade bibliographies Wilson Cumulative Book Index, Bowker's Publisher's Weekly and Book Publishing Record and by using these numbers libraries can order card set to Library of Congress simultaneously ordering the titles to the booksellers. BNB had adopted Standard Book Numbering System.

### **3.5.2 MARC (Machine-Readable Catalogue) service**

In this service, a central organization produces entries in a machine readable form, such as magnetic type etc, by using a computer, from the magnetic tapes. Member libraries can either directly search the information from the tapes or use the service for the creation of conventional forms of catalogues and bibliographies. This service is receiving increasing acceptance all over the world. (MARC project has been separately discussed at the end of this module).

### **3.5.3 Information service**

In this service, a bibliography is produced by a central organization, from which libraries can produce their catalogues either by cutting out the entries from the one sided printed bibliography and pasting them on cards etc. or using the information for their own cataloguing. The bibliography itself can also be used as a substitute for a catalogue. British National Bibliography and Indian National Bibliography comes under this service.

### **3.5.4 Cataloguing-in-Source**

To have every published book bearing on the verso of its title page an authoritative catalogue entry and tracings may be something of a cataloguer's dream, but it became reality in January 1958 when Library of Congress started notable experiment with the initial grant by the Council of Library Resources for including the cataloguing information for a book in the book itself.

Under this venture, the central organization received page proofs of books from the publishers. These were given rush cataloguing and returned to the

publishers alongwith a catalogue card within the same day on which they were received. When the book was finally published it was compared with the catalogue information prepared for it. From June 1958 to February 1959, the Library of Congress catalogued 1203 publications of 157 publishers. The average cost of cataloguing came of \$25 per publication. The entry generally appeared on the verso of the title page in the form of a more or less accurate facsimile of a Library of Congress card. The catalogue entries thus prepared were called Cataloguing-in-Source. However this experiment could not be continued due to financial and technical problems.

### **3.5.5 Cataloguing-in-Publication**

Despite of discontinuity of Cataloguing-in-Source experiment, there was an over increasing awareness of the great advantages of such a system and the economies that it could achieve.

The Cataloguing-in-Publication programme was started in 1971. The Library of Congress received \$200,000 as grants from the National Endowment for the Humanities and the Council on Library Resources for this programme for an experimental period of 2 years. Though this was a resurrection of the Cataloguing-in-Source, but it was given a new name as Cataloguing-in-Publication to show the difference between this project and the earlier experiment. This project was to include all forms of publications, motion pictures, maps and books. While CIS was an experimental project, CIP programme was intended to be a continuous programme.

Earlier under this scheme the entries are prepared at Library of Congress from gallery proofs and data returned to publishers within 10 working days. Sub-title, imprint and collations are omitted, but a complete record with the exception of collation is entered in MARC. The MARC is made available before four to six months of the publication of the book. This programme has processed over 28,958 titles during 1978 and later 1783 American publishers were collaborating in this scheme. This programme covered 73 per cent of total USA publications of book titles in 1978.

Being influenced by Library of Congress CIP programme, the British CIP programme began in 1975 and about 20 publishers were invited to participate initially. In 1983, 855 publishers took part in this programme. This meant about 43% of the publishers took active part in the programme.

In 1999 Electronic CIP Programme (ECIP) was introduced resifting wide speed partnernships become a possibility. With the development of ECIP in 2000, National Library of Medicine (USA) followed by Cornell University and Northwest University in 2005 became the first members of ECIP Cataloguing Programme. Presently 21 libraries across the United States are members of this programme ECIP participating libraries act as virtual Library of Congress cataloguing sections to catalogue forthcoming titles published by an affiliated university press, selected independent publishers or in specific subject areas.

### 3.5.6 Pre-Natal Cataloguing

Ranganathan has for many years urged the inclusion of a catalogue entry and a class number in each book on publication. He named it as the Pre-natal cataloguing. It involves completion of technical work by the National Central Library of a country on each book before its release by the publisher. Either a master stencil of the catalogue cards is prepared for each book before its release and its number is noted on the back of the title or a standard entry, including tracing for added entries is printed in the book itself, usually on the back of the title page.

Ranganathan has estimated that ‘there will be a saving of 79 per cent in the technical man-power of a national library system by the adoption of pre-natal classification and cataloguing of all home produced books by the National Central Library of a country.

S R Ranganathan has enumerated the following purposes of Pre-natal cataloguing:-

- (i) Faster availability of publications to readers through the quick processing and cataloguing.
- (ii) Cutting down of cost on cataloguing processes.

- (iii) Facilitation of standardization and easier identification of publications where ever they are quoted.

#### **4. Centralized Cataloguing Vs Cooperative Cataloguing**

Though both the terms seem synonymous, but there is quite difference. While Centralized cataloguing reduces cataloguing effort by providing centralized services, in Cooperative cataloguing participating libraries cooperate in cataloguing work.

According to Morsch ‘Centralized and Cooperative cataloguing are often confused, partly because a cooperative project involving more than two libraries needs a central office to coordinate the work and distribute the production. Nevertheless, it should be kept in mind that Centralized cataloguing is that which is done by a number of libraries. Cooperative cataloguing is done in 2 or more libraries for the benefit of each participant and may be made available to others.

Centralized cataloguing need not be cooperative. In one sense, the cataloguing done in the main building of a public library system, for use there are in branch catalogue as well, is centralized, though not, strictly speaking cooperative. The Printed catalogue card service of Library of Congress is centralized, since it is done centrally and, through the Card Division of the Library is made available to thousands of libraries to be used in their catalogues. It is not cooperative since it is done by one library primarily for its own use, the cost being borne by that library out of funds provided for the purpose of preparing a catalogue of its own.

Centralized cataloguing is preferred over cooperative cataloguing done to increased uniformity, more prompt availability of cards, and economy.

#### **5. Union Catalogue**

## 5.1 Definition

Union catalogue is a form of cooperative cataloguing. It has been defined by different librarians and library scientists in their own manner. Dr. S.R. Ranganathan has defined it as ‘list of all the documents in two or more libraries giving the names of all the libraries where copies of each document can be found’. He further adds that a union catalogue may cover all kinds of documents or any restricted kind of them. Another authority on union catalogue Kund Larsen has defined it ‘a uniform catalogue is a listing in one sequence of the holdings of two or more libraries’. Harrod’s Librarian’s glossary defines union catalogue as ‘a catalogue of stock in the various departments of a library, or of a number of library, indicating locations. It may be an author or a subject catalogue of all the books, or of a selection of them, and may be limited by subject or type of material’.

## 5.2 Advantages

Some of the advantages of union catalogue are as follows:

1. Helpful in procuring books on inter library loan.
2. Some books are costly e.g. reference books. Neighbouring libraries can decide what books will be purchased by which library. This type of cooperation will help in achieving economy.
3. It also helps in planning of stock in order to ensure better use of the collection and its preservation for future generation.
4. Union catalogue of periodicals provides useful bibliographical information. It indicates changes in the career of a periodical. As the entries in the union catalogues are carefully checked and standardized the libraries can follow the same rendering.

## 6. MARC I & II (MAchine Readable Catalogue)

A central organization catalogue the documents, records the data on magnetic tapes and supplies libraries with copies of the tapes. By using a

computer from the magnetic tape they can then produce printed catalogues of their collection or entries on cards and various kinds of bibliographies. The MARC service got increasing acceptance all over the world. Many libraries maintain their catalogues in the form of magnetic tape viz NASA (National Aeronautics and Space Administration). The computer is interrogated directly to answer enquires.

## 6.1 Historical Background

The Library of Congress investigations of the possibility of using automated techniques for its internal operations began in the late 1950's. As a result a committee was set up under the chairmanship of Gilbert W. King to determine the feasibility of applying automated techniques in Library of Congress. The committee submitted its report in 1963 and recommended for automation of cataloguing, searching, indexing and document retrieval activities of Library of Congress. As a result a programme to produce cataloguing data in machine readable form called MARC came into existence in 1966. Financial assistance was given by the Council of Library (USA).

## 6.2 MARC Pilot Projects 1966-68

In January 1966, Library of Congress invited 40 libraries to participate in pilot project. Out of those who responded affirmatively 16 were selected. This included variety of libraries viz Government, Public, University, Special, School libraries etc. In 1966 February a conference of participating libraries was called for describing:

- i. Concepts, objectives, schedules, functions and requirements of experiment.
- ii. The operation at Library of Congress.
- iii. MARC format
- iv. Materials to be sent weekly to participant libraries.
- v. The content of the report expected from the participating libraries.

Library of Congress took the herculean task of completing within 8 months the design and procedures and computer programmes required both for the Library of Congress operations and for the participants. Library of Congress

started distribution in September 1966. First tap was sent in October and weekly service containing 800 titles began in November 1966. The participating libraries were computing the tapes with the help of computer. The project was limited to cataloguing data for English language monographs. Earlier it was decided to end the project by September, 1967 which proved unrealistic and it was extended upto June 1968 and pilot service was extended to four more libraries. Total 50,000 machine readable records were distributed. A final project report was published in 1968 describing the experience of Library of Congress and participating libraries. It contains a detailed description of MARC pilot system, including the tape format, character sets, bibliographic codes, and input procedure. An analysis of the cost of production during the project period, as well as brief summaries of the computer programmes used are provided.

### 6.3 MARC II

4 months before the end of MARC I project, MARC II was begun after substantial evaluation of MARC I format. It covered all forms of material viz books, serials, maps, music, journal articles etc. In the beginning about 50 libraries became members of this programme on subscription basis and they were able to acquire in machine readable form cataloguing data for American as well as foreign publications acquired by Library of Congress under the Shared Cataloguing Programme. Since 1965, the Library of Congress has established a global network of National and Regional Offices for International Cooperation. Each office is responsible for the selection, acquisition and dispatch of material published locally. In Britain, office was located with the bookseller Stevens and Brown and the bibliographical information was supplied by BNB in MARC tapes.

From July 1969, Library of Congress shifted over to a period of testing the new procedures and programmes and a series of workshops were held throughout the country for the purpose of briefing library staff on the MARC II formats, Library of Congress procedures and the uses of MARC data by libraries.

The first 'Subscriber Guide to the MARC Distribution Service (later known as Books: A MARC format) was published in August 1968. MARC manuals

were published in 1969. Through these the institutions which desired to subscribe to MARC would have the necessary information for programming.

In accordance with the original plans to specify MARC formats for forms of material other than books, Library of Congress published formats for serials and maps in 1970, for films in 1971 and manuscripts in 1973. The music and sound recordings formats were published in 1975. In the design of all formats, Library of Congress worked with other organizations that had expert knowledge of the material concerned.

The distribution services were expanded as funds were available:

- (a) Distribution of records for films began in 1972.
- (b) Distribution of records for Serial, Maps and French language books began in 1973.
- (c) Upto 1974 about 5,00,000 records were supplied.

During all these years, MARC has expanded its scope from English language records to all Roman alphabet language. Besides, the conversion system has changed from paper tape input device to online cathode ray tube terminals. Library of Congress plans to continue to expand MARC until all the Library of Congress cataloguing i.e. 2,50,000 title annually is encompassed within MARC system.

#### **6.4 RECON – REtrospective CONversion**

Since the MARC distribution service was found to be successful the other libraries throughout America showed interest in converting their existing catalogues. If this were to be undertaken in a cooperative basis, it would be economical without any duplication of titles in machine readable form. Since Library of Congress was also interested to convert its retrospective records, it agreed for a large scale centralized conversion of retrospective cataloguing records and their distribution to other libraries. With the help of Council of Library Resources, the Library of Congress was able to conduct a study. This was called as RECON (Retrospective Conversion). This study brought out a report in 1969 and examined in detail (a) the hardware and software required for a large scale conversion (b) existing Library of Congress files to select the one

which is most suitable for conversion (c) the rationale to set priorities for conversion and to do the job satisfactorily and (d) the costs of hardware, software and man power for conducting the conversion process.

As a result of investigations, the study arrived at the following conclusions:

- (1) The MARC distribution service should cover all language and all forms of material.
- (2) Conversion of the retrospective records to machine readable form could be done early.
- (3) This service needs a standardization of bibliographic content and machine format standardization may be the same for current as well as retrospective material.
- (4) It should be a centralized effort and should be under the direction of the Library of Congress.

On the basis of these recommendations, RECON pilot project was launched in 1969. The pilot project continued for 2 years and published its report in 1972. During this pilot project about 58,000 records were converted.

## 6.5 MARC in Other Countries

MARC came to U.K. in September 1967 with the grant of OSTI. By September 1968 tapes were produced. From May 1969 regular weekly service started. Not several institutions are making use of this service. Some other countries like Australia, Canada, France, Germany, Netherlands and Scandinavia etc have agreed to work to same MARC format standard. MARC is constantly changing US MARC and CAN MARC were harmonized in 1997 to create MARC 21 (meaning MARC for 21st century). British Library dropped UK MARC in favour of MARC 21. New tags and fields were added to accommodate new media i.e. field 856. Electronic location and Access was added in 1993 to make web-based records accessible from MARC records. In July 2002, the 'Agreement for the development and publication of MARC 21 format' was signed by the representations of the National Library of Congress, the National Library of Canada and the British Library.

## 6.6 Uses of MARC

Some of the applications of MARC are noted below:-

1. MARC tapes are used for selection purposes.
2. It is useful in the production of catalogue cards and book catalogues.
3. A bibliography in microform 'Books in English' is produced by merging BNB/MARC plus LC/MARC.
4. LC selects appropriate records from the MARC files for inclusion in the production of bibliographic tools for the blind and physically handicapped.
5. MARC is now searchable online by LC Card number within the Library of Congress.
6. The MARC data base is being used more and more frequently in Library of Congress as a bibliographic reference to supplement the card catalogues.

